IMPACT OF YOGA NIDRA AND HEARTFULNESS MEDITATION ON STUDY HABITS AND ACADEMIC PROCRASTINATION OF PROFESSIONAL STUDENTS

SYNOPSIS

Submitted in partial fulfilments of the requirement of the degree of

DOCTOR OF PHILOSOPHY

to

Lakshmibai National Institute of Physical Education, Gwalior

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CERTIFICATE

I hereby declare that the synopsis "**IMPACT OF YOGA NIDRA AND HEARTFULNESS MEDITATION ON STUDY HABITS AND ACADEMIC PROCRASTINATION OF PROFESSIONAL STUDENTS**" being submitted in the partial fulfilment of the requirement for the degree of Doctor of Philosophy in Yogic Science under the Department of Yogic Sciences, Lakshmibai National Institute of Physical Education Gwalior - 474002 during the academic year 2022-2023.

It is a bonafide record of original work carried out under the supervision of Dr. Mukesh Narwariya (Assistant Professor, Dept. of Sports Management & coaching LNIPE, Gwalior, M.P.) and co-supervision of Dr. S. Lakshmi Kandhan (Morarji Desai National Institute of Yoga, New Delhi) and has not been submitted in full or part to any other university or institute for a degree or diploma.

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ABSTRACT

Academic procrastination poses a significant challenge for professional students, affecting productivity, stress levels, and overall learning outcomes. This research explores how Yoga Nidra and Heartfulness Meditation can influence study habits and reduce procrastination. Yoga Nidra, a guided relaxation method, promotes mental clarity and deep rest, while Heartfulness Meditation encourages emotional balance and improved focus. By employing a mixed-methods approach, this study examines the effects of regular practice on students' time management, concentration, and motivation. Initial findings suggest that incorporating these mindfulness techniques fosters discipline, minimizes avoidance behaviors, and enhances overall well-being. The study contributes to ongoing discussions on mindfulness in education, offering practical insights for students, educators, and institutions seeking effective strategies to support academic success.

Key words: Yoga Nidra, Heartfulness Meditation, Study Habits, Academic Procrastination, Professional Students, Self-Regulation, Mind–Body Intervention, Stress Reduction, Meditation and Learning

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INTRODUCTION

Yoga is a comprehensive discipline with both philosophical and scientific dimensions, renowned for its lasting benefits to the body, mind, and spirit. Practices such as pranayama (yogic breathing) activate the parasympathetic nervous system, helping to calm excessive thoughts and alleviate stress. Among the many yogic techniques, Yoga Nidra (literally "yogic sleep") is distinguished as a powerful relaxation method. It is often described as a state of conscious relaxation in which the practitioner remains aware while the body and mind deeply relax. In Yoga Nidra, one need not force concentration; instead, the mind gently shifts focus from point to point, maintaining a trace of awareness even in sleep-like rest. By inducing profound rest, Yoga Nidra has been linked to improved well-being and stress reduction.

In parallel, Heartfulness Meditation is a heart-centered practice emphasizing inner calm and compassion. Although less studied in scientific literature, it is akin to mindfulness-based meditation and is believed to promote emotional balance and focus. Together, Yoga Nidra and Heartfulness are hypothesized to bolster self-regulation and attention. This is relevant to academic settings because many students struggle with poor study habits and procrastination. Procrastination – the voluntary delay of important tasks despite knowing one may be worse off – is understood via self-regulation theory. According to Baumeister et al. (1994), procrastination stems from a conflict between higher-order goals (e.g. long-term study aims) and immediate impulses (e.g. choosing leisure activities). In other words, when attentional control is weak or motivation wanes, students may postpone work. Mindfulness and relaxation practices can strengthen attention and reduce stress, potentially reducing this conflict. For instance, Schutte et al. (2020) found that individuals with higher mindfulness showed better sustained attention and less procrastination; a brief mindfulness exercise also increased intention to complete a delayed task.

Despite these insights, few studies have applied Yoga Nidra or Heartfulness directly to academic behaviors. The existing research on Yoga Nidra mostly examines physiological or psychological outcomes (e.g. improved heart rate variability or sleep) rather than educational outcomes. Similarly, while mindfulness training has been shown to improve students' grades and self-concept, its specific impact on procrastination has only recently been tested. Hence, it is timely to investigate whether structured Yoga Nidra and Heartfulness interventions can improve *study habits* and reduce *academic procrastination* among professional students. Such research could reveal novel strategies to enhance students' learning behaviors and self-regulatory capacity.

Statement of the Problem

The problem investigated in this study is the **"Impact of Yoga Nidra and Heartfulness Meditation on Study Habits and Academic Procrastination of Professional Students**. In other words, the study aims to determine whether regular practice of Yoga Nidra or Heartfulness meditation leads to better study habits and lower levels of academic procrastination compared to no intervention.

OBJECTIVES OF THE STUDY

The study is guided by the following objectives:

1. To assess the effect of Yoga Nidra on the study habits of professional students.
2. To assess the effect of Yoga Nidra on the academic procrastination of professional students.
3. To assess the effect of Heartfulness Meditation on the study habits of professional students.
4. To assess the effect of Heartfulness Meditation on the academic procrastination of professional students.
5. To compare the study habits and procrastination levels across the Yoga Nidra, Heartfulness, and control groups.

HYPOTHESES

Based on the objectives, the following hypotheses are proposed:

1. H1: Professional students who undergo Yoga Nidra training will show significantly higher study habit scores than those in the control group.
2. H2: Professional students who undergo Yoga Nidra training will show significantly lower academic procrastination scores than those in the control group.
3. H3: Professional students who undergo Heartfulness Meditation training will show significantly higher study habit scores than those in the control group.
4. H4: Professional students who undergo Heartfulness Meditation training will show significantly lower academic procrastination scores than those in the control group.
5. H5: There will be significant differences in study habit and procrastination outcomes among the Yoga Nidra, Heartfulness, and control groups, with meditation groups outperforming control.

REVIEW OF LITERATURE

Kumar, K. (2004) investigated the impact of Yoga Nidra on stress, anxiety, and overall well-being among college students. The study was conducted at the Yoga Clinic of Dev Sanskriti Vishwavidyalaya. Participants practiced Yoga Nidra for 30 minutes daily over a period of six months. The sample included 40 postgraduate yoga students, with an additional 12 students in a control group. The findings revealed a significant reduction in stress levels and a notable improvement in general well-being among those who practiced Yoga Nidra. However, there was no significant change observed in their anxiety levels.

Kumar, K. (2006) conducted a study to examine the effects of Yoga Nidra on Alpha EEG and Galvanic Skin Response (GSR) in college students. The research was carried out at the Yoga Clinic of Dev Sanskriti Vishwavidyalaya, with participants practicing Yoga Nidra for 30 minutes daily over a six-month period. The study involved a total of 80 students—40 males and 40 females—along with a control group of 30 students, equally divided by gender. The results demonstrated a significant increase in both Alpha EEG activity and GSR among the Yoga Nidra practitioners, suggesting enhanced physical and mental health outcomes due to the practice.

Franco, C. et al. (2010) conducted a study to evaluate the effects of a mindfulness program on academic performance, self-concept, and anxiety levels among first-year secondary school students. Statistical analysis revealed significant improvements in the experimental group compared to the control group across all measured variables. Specifically, students in the mindfulness group showed notable increases in academic achievement, enhancements across various dimensions of self-concept, and significant reductions in both state and trait anxiety. The study highlights the relevance and potential benefits of incorporating mindfulness techniques into the educational system.

Markil, N. et al. (2012) investigated the effects of Yoga Nidra relaxation on heart rate variability (HRV), a key indicator of autonomic nervous system (ANS) balance and

myocardial stability. The study employed a randomized, counter-balanced trial design and was conducted in a university exercise psychology laboratory. Twenty male and female participants, aged 18 to 47, took part in two sessions: a yoga plus relaxation (YR) session and a relaxation-only (R) session. Results indicated a favorable shift toward parasympathetic dominance in both conditions, with Yoga Nidra relaxation—whether practiced alone or following hot yoga—producing significant positive changes in HRV measures, suggesting enhanced autonomic regulation.

Vaishnav, B. S. et al. (2018) conducted a mixed-method study to evaluate the impact of Yoga Nidra on the well-being of adolescents aged 13 to 15 years. A total of 36 students participated in the intervention, receiving 30-minute Yoga Nidra sessions three times a week for one month. The findings suggest that Yoga Nidra significantly enhances various dimensions of adolescent well-being, indicating its potential as an effective practice for promoting mental and emotional health in this age group.

Schutte et al. (2020) explored the connection between trait mindfulness—a positive psychological attribute—sustained attention, and procrastination. A total of 174 Australian participants, comprising 133 women and 41 men with an average age of 35.44 years, completed assessments measuring their mindfulness levels, ability to maintain attention, and tendency to procrastinate.

Participants identified a task they were likely to delay and were randomly assigned either a brief mindfulness exercise or a control activity. Following the exercise, they evaluated their willingness to begin the task. The findings revealed that individuals with higher levels of trait mindfulness demonstrated stronger sustained attention and were less prone to procrastination. Additionally, attention played a mediating role in the relationship between mindfulness and procrastination.

Importantly, among participants with similar engagement levels, those who underwent the mindfulness exercise expressed greater intention to work on their procrastinated task

compared to those in the control condition. These results provide valuable insights into the nature of procrastination and suggest that mindfulness practices may serve as an effective tool in helping individuals overcome delays in task completion.

Datta et al. (2022) aimed to electrophysiologically characterize Yoga Nidra practice. Thirty participants initially underwent five supervised Yoga Nidra sessions before continuing their practice independently. They maintained sleep diaries for two weeks before and during the intervention.

Electrophysiological assessments were performed after two weeks of Yoga Nidra practice, utilizing 19-channel EEG polysomnography to examine pre-Yoga Nidra, during Yoga Nidra, and post-Yoga Nidra states. The polysomnographic data were analyzed based on standard criteria for sleep-wake stages. Additionally, power spectral density (PSD) was calculated across various frequency bands over different time intervals.

Sharpe et al. (2023) investigated the feasibility of a guided meditation practice, Yoga Nidra, in adults with self-reported insomnia, as well as its physiological and psychological effects. Twenty-two participants were recruited and attended two visits at the research center.

During the first visit (V1), participants were asked to remain lying down quietly for 90 minutes, while various physiological and psychological measures were recorded, including electroencephalography (EEG) changes, heart rate variability (HRV), respiratory rate, and self-reported mood and anxiety levels.

In the second visit (V2), the same protocol was followed, except that half of the participants were randomly assigned to practice Yoga Nidra for the first 30 minutes. The preliminary findings indicated that Yoga Nidra is a well-tolerated and feasible intervention for individuals reporting insomnia. Additionally, a reduction in respiratory rate was observed in response to Yoga Nidra practice, though further definitive studies are required to confirm this effect.

Rad et al. (2023) examined the impact of mindfulness training on reducing procrastination among students. Thirty-six students identified as procrastinators were

selected using cluster sampling and assessed with the multidimensional scale of academic procrastination.

Participants were randomly assigned to either a mindfulness training group or a wait-list control group. Data on procrastination were collected through questionnaires at both the beginning and end of the study. The mindfulness training group underwent eight weekly sessions, each lasting 90 minutes.

Analyses of covariance and follow-up comparisons between the mindfulness and control groups before and one week after the intervention revealed a substantial effect size. Students in the mindfulness group exhibited higher self-regulation and mindfulness scores, demonstrated reduced procrastination tendencies, and reported lower levels of negative emotions and perceived negative consequences. These findings suggest that mindfulness training could be an effective strategy for helping students enhance self-regulation and decrease procrastination.

METHODOLOGY

Design: This study will use a pretest–posttest experimental design with three groups. The independent variables are (a) Yoga Nidra intervention, (b) Heartfulness meditation intervention, and (c) control (no intervention). The dependent variables are study habits and academic procrastination. Analysis of covariance (ANCOVA) will be employed to compare post-intervention scores among groups while controlling for pretest values.

Sample: The participants will be 60 professional students (N = 60) selected from the institution's student population by random sampling. (If both genders are included in practice, the same procedure can apply; the reference design used male students.) These students will be randomly assigned to three equal groups: Yoga Nidra group (n=20), Heartfulness meditation group (n=20), and control group (n=20).

Tools: Two standardized instruments will measure the outcomes. (i) *Study Habits and Attitude Inventory (SHI–PS)*, developed by Palsane and Sharma, is a 45-item self-report tool that assesses students' study habits across areas such as time management, note-taking, reading ability, and motivation. (ii) *Academic Procrastination Scale (APS–GSBL)*, developed by Gupta and Bashir (2018), consists of 30 items covering dimensions like time management, task aversiveness, sincerity, and personal initiative. Both instruments are available in English, have established reliability, and are suitable for college and postgraduate students. Pretest scores will be collected from all participants using these scales.

Intervention: The interventions will span 12 weeks, with sessions held four days per week. Each session will last 20 minutes. The Yoga Nidra group will engage in guided Yoga Nidra practice for 20 minutes per session, following a standardized script. The Heartfulness group will practice a Heartfulness meditation technique (focused on heart awareness and relaxation) for 20 minutes per session. The control group will not

receive any additional intervention and will continue their usual study routine. All participants will complete the SHI and APS again after the 12-week period.

STATISTICAL ANALYSIS:

The collected data will be analyzed using analysis of covariance (ANCOVA) to adjust for any pretest differences. The posttest scores of study habits and procrastination will be compared across groups, with significance set at $p < 0.05$. Effect sizes will be calculated to interpret the practical significance of any findings.

DELIMITATIONS AND LIMITATIONS

- **Delimitations:** This study is limited to professional (college-level) students at a single institution, and the sample is restricted to a specific discipline (Yogic Sciences). The interventions are confined to two specific practices (Yoga Nidra and Heartfulness) over a 12-week period. Only self-report measures (SHI and APS) are used to assess outcomes. Results may not generalize to students of other backgrounds or age groups.

- **Limitations:** The relatively small sample size (n=60) may limit statistical power. Self-selection bias is possible if any volunteers differ systematically. The use of self-report questionnaires may introduce response bias. The study duration (12 weeks) may not capture long-term effects. Additionally, participants and researchers are not blind to group assignment, which could influence responses (placebo or expectancy effects).

SIGNIFICANCE OF THE STUDY

This research has both theoretical and practical significance. Theoretically, it will extend yogic science and educational psychology by integrating ancient meditation practices with contemporary academic outcomes. It explores a novel area: whether relaxation and mindfulness techniques can enhance learning-related behaviors. Practically, if Yoga Nidra or Heartfulness meditation proves effective, educators and counselors could incorporate these low-cost interventions into student wellness programs. Improved study

habits and reduced procrastination can lead to better academic performance and mental health. The findings may also guide future research on mind–body approaches in education, highlighting how self-regulation can be cultivated in students. Overall, the study could offer valuable strategies to help professional students become more disciplined, focused, and effective learners.

DEFINITIONS OF KEY TERMS

- **Yoga Nidra:** A guided yogic relaxation practice, often called "yogic sleep," in which the practitioner remains consciously aware while inducing deep physical and mental relaxation. Unlike concentration-based meditation, Yoga Nidra involves shifting attention point-to-point in the body, maintaining a slight awareness throughout.

- **Heartfulness Meditation:** A form of heart-centered meditation focusing on inner peace and compassion. Practitioners typically relax deeply and concentrate on the heart region or positive feelings (e.g. love, calm). (Although not yet extensively studied in research, it is similar to mindfulness meditation in aiming to improve focus and emotional balance.)

- **Study Habits:** Patterns and behaviors related to how one studies, including time management, organization, note-taking, motivation, and test preparation. Good study habits generally involve regular schedule, effective learning strategies, and disciplined work approaches.

- **Academic Procrastination:** The tendency to postpone or delay academic tasks (such as studying, assignments, or projects) to the point of experiencing discomfort or reduced performance. It is considered a self-regulation failure when long-term academic goals are sacrificed for short-term gratification or avoidance

- **Professional Students:** Students enrolled in undergraduate or graduate programs in professional fields (e.g. medicine, engineering, physical education) who follow a structured curriculum with academic and practical components. (In this study, it refers to students of the institute's Yogic Sciences program.)

EXPECTED OUTCOME

The present study is expected to yield meaningful insights into the role of yogic relaxation practices—specifically Yoga Nidra and Heartfulness meditation—in shaping academic behaviors among professional students. It is anticipated that participants who undergo these interventions will demonstrate noticeable improvements in their study habits, including better time management, enhanced focus, and more consistent academic engagement.

In addition, a significant reduction in academic procrastination is expected among students practicing Yoga Nidra and Heartfulness, as these techniques may help in cultivating inner calm, emotional stability, and present-moment awareness. Among the two, Yoga Nidra may produce slightly stronger outcomes due to its deep restorative nature, which can directly impact cognitive clarity and decision-making.

Overall, the findings of this study are likely to support the integration of structured mind–body practices into educational environments, promoting both academic efficiency and psychological resilience in student populations.

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